

Serial No.: 10/534,961
Examiner: Sanjay Cattungal
Reply to Office Action Mailed March 10, 2008
Page 2 of 4

RECEIVED
CENTRAL FAX CENTER

JUN 09 2008

REMARKS

Reconsideration is requested in view of the following remarks. Claims 1-6 remain pending in the application.

Claim Rejections – 35 USC § 102

Claims 1, 2 and 6 are rejected under 35 USC § 102(b) as being anticipated by Blumenthal (US 5,048,529). Applicant respectfully traverses this rejection.

Claim 1 requires an inserting portion including a swing mechanism and a grip portion including a motor for driving the swing mechanism, where the swing mechanism includes a shaft for transmitting the rotational movement of the motor to a transducer in the insertion portion. The present shaft included in the swing mechanism that is in the insertion portion helps swing the transducer in the insertion portion smoothly and reduce displacement of the transducer and thus helps the user obtain precise ultrasonic images (see page 2, lines 34-37 of the specification).

Blumenthal fails to disclose a shaft included in a swing mechanism that is in an inserting portion of an ultrasonic probe as required by claim 1. On the other hand, the shaft of drive motor 19 in Blumenthal is coaxial with the drive motor 19 and is clearly within a handle portion 12 of the ultrasonic transducer probe 11, which is distinct from the insertion portion required by claim 1. In fact, the rotational movement of the drive motor 19 is transmitted from the shaft in the handle portion to the pulleys in the stem portion 13 and window portion 14 by a belt (see Blumenthal, col. 2, lines 13-19 and lines 28-34, col. 3, line 15, and Fig. 1). This is completely distinct from the present shaft, which is included in the swing mechanism in the insertion portion.

For at least this reason, claim 1 is patentable over Blumenthal. Claims 2 and 6 depend from claim 1 and are patentable along with claim 1 and need not be separately distinguished at this time. Applicant is not conceding the relevance of the rejection to the remaining features of the rejected claims.

Serial No.: 10/534,961
Examiner: Sanjay Cattungal
Reply to Office Action Mailed March 10, 2008
Page 3 of 4

Claim Rejections – 35 USC § 103

Claims 3-5 are rejected under 35 USC 103(a) as being unpatentable over Blumenthal in view of Kawabuchi et al. (US 4,895,158). Applicant respectfully traverses this rejection. Claims 3-5 ultimately depend from claim 1 and are patentable over Blumenthal in view of Kawabuchi et al. for at least the same reason discussed above regarding claims 1, 2 and 6. In addition, the reference disclosures do not even suggest the invention of claims 3-5.

The shaft of the drive motor 19 in Blumenthal has an axis that is parallel to the axis of the driven pulley 17 (see Blumenthal, Fig. 1), where a transducer 16 is attached to. The movement is transmitted from the shaft of the drive motor 19 to the driven pulley 17 through fixed position idler pulleys 32, 36 and sliding position idler pulleys 33, 34 in the stem portion 13. These idler pulleys 32, 33, 34, 36 have axes parallel to the axis of the shaft of the drive motor 19 (see Blumenthal, col. 2, lines 45-62 and Fig. 1). As a result, the rotational movements transmitted between the shaft of the drive motor 19 and transducer 16 in Blumenthal are in planes parallel to each other.

Kawabuchi et al. discuss bevel gears 90 and 180 for transmitting rotational movements of a motor 19 to a transducer element 130 (see Kawabuchi et al., col. 4, lines 45-50 and Figs. 3 and 5). These bevel gears 90 and 180 transmit the rotational movements of the motor 19 through a shaft 190 that are in the plane orthogonal to the plane of the rotational movements of the transducer element 130. This is completely different from the transmission mechanism of Blumenthal.

Therefore, there is no reasonable basis to modify the shaft of the drive motor 19 in Blumenthal to the shaft as required by claims 3-5, which is included in the swing mechanism in the insertion portion. For at least these reasons, claims 3-5 are patentable over Blumenthal in view of Kawabuchi et al. Applicant is not conceding the relevance of the rejection to the remaining features of the rejected claims.

Serial No.: 10/534,961
Examiner: Sanjay Cattungal
Reply to Office Action Mailed March 10, 2008
Page 4 of 4

In view of the above, favorable reconsideration in the form of a notice of allowance is respectfully requested. Any questions regarding this communication can be directed to the undersigned attorney, Douglas P. Mueller, Reg. No. 30,300, at (612) 455-3804.



Dated: June 9, 2008

DPM/cy

Respectfully submitted,

HAMRE, SCHUMANN, MUELLER &
LARSON, P.C.
P.O. Box 2902-0902
Minneapolis, MN 55402-0902
(612) 455-3800

By: 

Douglas P. Mueller
Reg. No. 30,300